Weather for the 100m final on 5th August

Description

Yesterday we looked at the weather for ‘Super Saturday’, today is the turn of Sunday 5th August. Sunday is another busy day in the Olympic calendar with the 100m final as well as numerous medal events. We look back at what the weather has been like on 5th August for the last 30 years.

London's weather over the last 30 years on 5 August

Sunday 5th August 2012 is the day of the men's 100m final and also sees medals awarded in other athletics events, as well as sailing, shooting and tennis. With so many outdoor events, the weather could have an influence on the sporting outcomes.

Here we take a look at the weather seen on 5th August over the last 30 years.

Averages

SUNSHINE
7.1 (hrs/day)

RAINFALL
1.82 (mm)

WIND
19.6 (Kt)

MAX TEMP
23.8 (°C)

MIN TEMP
14.8 (°C)

Maximum and minimum

Highest recorded **maximum** temperature **30.5 °C** in 2003

Lowest recorded **minimum** temperature **10.4 °C** in 1986

Most recorded **sunshine** hours **14.2** in 1998

Date	(hrs/day)	(mm)	Wind	Max (°C)	Min (°C)
5/8/70	3.2	4	-	25.0	17.2
5/8/71	9.5	1.4	-	20.0	14.2
5/8/72	3.5	0	-	21.0	12.0
5/8/73	0	8.6	28	18.4	13.9
5/8/74	8.2	0	17	20.8	12.1
5/8/75	4.5	3.6	22	29.6	20.4
5/8/76	9.6	0	16	24.0	12.3
5/8/77	2.9	10.6	19	21.8	14.6
5/8/78	3.3	1.9	21	21.5	14.1
5/8/79	9.7	0	14	22.9	13.1
5/8/80	5.9	0	31	20.7	16.3
5/8/81	6.6	22.3	11	28.6	17.0
5/8/82	0.1	0	10	22.7	15.6
5/8/83	12	0	15	24.2	13.8
5/8/84	4.3	0	19	18.8	14.1
5/8/85	3.5	0.1	26	19.0	13.2
5/8/86	10.2	0	17	21.4	10.4
5/8/87	7.7	0	14	18.8	10.5
5/8/88	8.6	0	22	24.2	15.6
5/8/89	13.5	0	16	26.4	13.3
5/8/90	8.9	0	20	24.2	16.8
5/8/91	3.6	0	17	23.8	15.8
5/8/92	2.6	0.6	24	24.2	15.2
5/8/93	9.8	0	27	20.8	15.0
5/8/94	8	0	12	27.8	18.3
5/8/95	13.2	0	17	26.2	14.4
5/8/96	12.7	0	23	26.1	14.8
5/8/97	3.2	0	25	22.9	16.5
5/8/98	14.2	0	19	26.2	13.0
5/8/99	10.5	0	19	25.6	18.0
5/8/00	8.5	0	14	23.7	13.3
5/8/01	12.7	0	22	23.3	12.7
5/8/02	3.1	1.8	17	20.5	13.5
5/8/03	10	0	22	30.5	18.9
5/8/04	1.9	0	35	28.3	18.7
5/8/05	6.2	0.2	21	22.3	14.0
5/8/06	10.6	0	15	26.9	13.3
5/8/07	13.6	0	20	29.3	15.7
5/8/08	0	1.4	20	20.4	13.9
5/8/09	2.5	0	17	27.9	17.1
5/8/10	7.9	0	22	22.6	12.1
5/8/11	7.7	0	19	25.6	14.9

Will the weather be typical of this day previously? For the latest forecast for all Olympic events taking place this Sunday, visit our Olympic events pages.

Date Created
August 2012

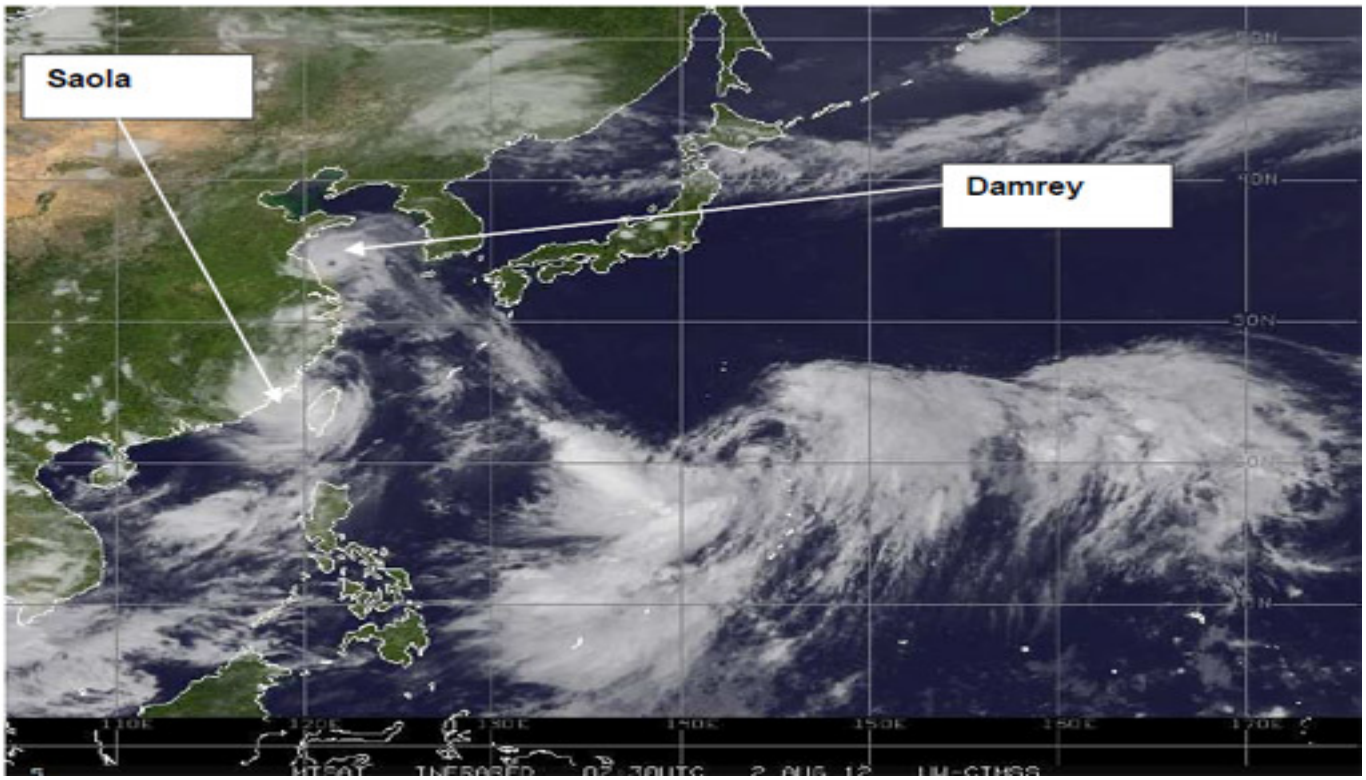
Tropical storm season heading towards its peak

Description

August and September are the months when tropical cyclone activity in the northern hemisphere reaches its peak. As August begins there are currently several active tropical cyclones and possibly more to come.

Typhoon Saola formed in the west Pacific and gave a glancing blow to the northern Philippines. Over 900 mm rain in three days were recorded in Baguio. There were reports of flooding across northern Luzon and a number of fatalities. Saola has now slowly moved on towards Taiwan dumping similar amounts of rain and causing flooding and mudslides. It is expected to move onwards to Fujian province of China in the next day or so.

Meanwhile to the north of Saola the more compact Typhoon Damrey has tracked just to the south of Kyushu in south-west Japan. This area is still recovering from the devastating floods of last month. The typhoon has tracked across the Yellow Sea and is set to make landfall over the Handong province of China just south of the large city of Qingdao.



These two typhoons are part of a large complex area of disturbed weather covering much of the tropical western Pacific. Another storm is forming out at sea and latest forecast suggest it could track close to southern Japan in a few days time. There are even suggestions that yet another storm could develop a few days later in the open waters of the west Pacific.

Meanwhile in the Atlantic after an active start to the season, July was completely stormless. August has started with the formation of a depression which looks set to track through the Leeward Islands and into the Caribbean Sea. However, there is a high degree of uncertainty as to whether this depression will undergo significant strengthening. El Niño conditions are starting to develop as predicted by longer range forecasts for the tropics from the Met Office, which acts to suppress Atlantic tropical storm activity by making atmospheric conditions unfavourable. It is possible that conditions may be hostile towards storm development in this region in the next few days, but it is by no means certain.

The Met Office seasonal forecast for Atlantic tropical storm activity issued in May predicted a near-average season with the most likely number of storms in the June to November period being 10. Since June just two tropical storms have occurred so far in this region.

For more information see our tropical cyclones web pages or follow @metofficestorms on Twitter.

Related articles

- Typhoons trigger flood alert (China Daily)
- Torrential rains wreak havoc in Taiwan (Todayszaman.com)
- Philippine floods persist, toll rises to 23 (channelnewsasia.com)

Date Created
August 2012

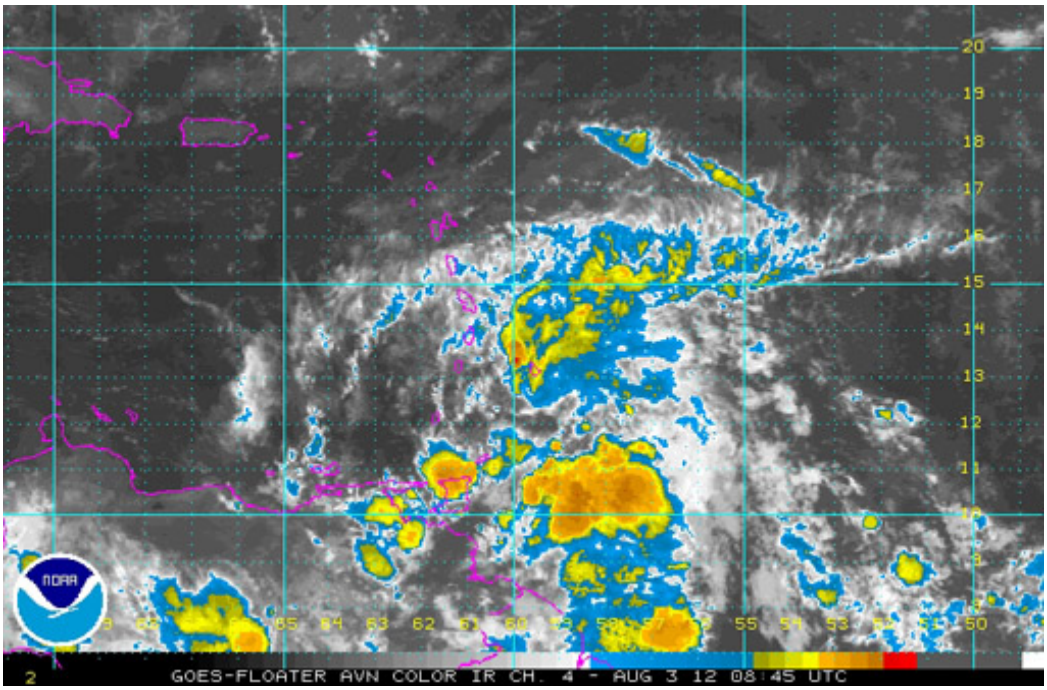
Tropical storms update – Damrey, Saola, Ernesto and Haikui

Description

As reported in yesterday's blog, the tropical west Pacific has been active recently with typhoons Saola and Damrey both causing disruption in parts of south-east Asia. Saola weakened to a tropical storm before making landfall over the Fujian province of China. Huge amounts of rainfall were recorded in Taiwan and mainland China from the storm. Taichung on Taiwan recorded 316 mm (12.4") rain in just 12 hours yesterday.

Meanwhile just a few hours earlier Tropical Storm Damrey made landfall near the border of Jiangsu and Handong provinces of China. As a more compact system, it did not produce as much rain as Saola, but still packed winds of over 60 mph as it made landfall.

As expected, the high activity in the west Pacific continues. Tropical Storm Haikui has formed and is expected to develop into a large typhoon as it moves towards south-east Asia. Behind this it is likely that yet another tropical storm will form in the next couple of days.



Tropical Storm Ernesto

Meanwhile in the Atlantic the tropical depression which developed on Wednesday has strengthened into Tropical Storm Ernesto. It is still fairly disorganised, but bringing stormy conditions to the Caribbean islands of St. Lucia and St. Vincent having already passed over Barbados. There is still uncertainty as to how much Ernesto will strengthen, but it is not impossible it could become a hurricane as it continues its track westwards through the warm waters of the Caribbean Sea in the coming days.

For more information visit our tropical cyclone web pages or follow @metofficestorms on Twitter.

Date Created
August 2012

Weather at the 1948 London Olympic Games

Description

2012 is the third time that the capital of the UK is hosting the Olympic Games. In this short feature Dan Suri, Deputy Chief Forecaster at the Met Office reflects on the weather in 1948 and the similarities with 2012.

The London 2012 Olympic Games might not be the first London Olympics characterised by hot weather in the run-up to the start and then to be followed by rather changeable conditions through much of the Games themselves.

Just as we saw this year, July 1948 was characterised by generally very cool and dull conditions until shortly after mid-month when high pressure built across the UK to bring hot and sunny conditions in the run up to the start of the Olympic Games.

During this warm spell in 1948 Milford, near Guildford saw temperatures reach 35 °C on the 28th, and Greenwich, for example, saw 32.8 deg C on three successive days up to the end of the month. This year, also saw a warm fine weather in the run up to the Games with a temperature of 30.7 °C recorded at St. James Park on the 25th July.

The warm conditions of late July 1948 persisted into early August, with the 1st being the hottest day of the month, with 28.3 °C being recorded at Greenwich. However, conditions started to turn more unsettled, where thunderstorms on the 2nd led to scattered falls of more than 50 mm of rain in areas extending from South Wales to East Anglia, with Silsoe, near Bedford recording 100 mm.

Cooler, cloudier weather then quickly settled in over the UK, with maximum temperatures falling by 8 to 10 °C in the London area in the first few days of August before conditions turned much more unsettled as a succession of low pressure systems crossed the UK. These depressions brought spells of wet and at times windy weather to much of the country.

Across London, although most of first half of August 1948 was rather unsettled, there were still some fine days as well. However, the period between the 6th and 8th was particularly unsettled; 30-60mm rain was recorded quite widely across the London.

Maximum temperatures then remained typically in the high teens or low 20s Celsius for the rest of the first half of August.

Conditions then started to become a little less changeable mid-month, just in time for the closing ceremony. The rest of August then remained on the unsettled side, though over southern UK not to anywhere near the same extent as during the first half of the month.

Weather certainly affected outdoor sporting events through 1948. Photos show the main running track often taking on a wet appearance with puddles forming in places, whilst contemporary reports talk of rainy conditions during major events. However what is clear is that the sport still went on and the Games will be remembered for setting the standard for the Olympic Games in the post-war era.

Related articles

- London Olympics 1948 Photos (vintag.es)
- Journalist who covered 1948 London Olympics is reporting on this one too (guardian.co.uk)
- London Olympics opening ceremony to escape the rain, say forecasters (guardian.co.uk)
- LIFE at the 1948 London Olympics (life.time.com)
- The last time London hosted the Olympics: the 1948 Olympic Games (weheartvintage.co)

Date Created
August 2012

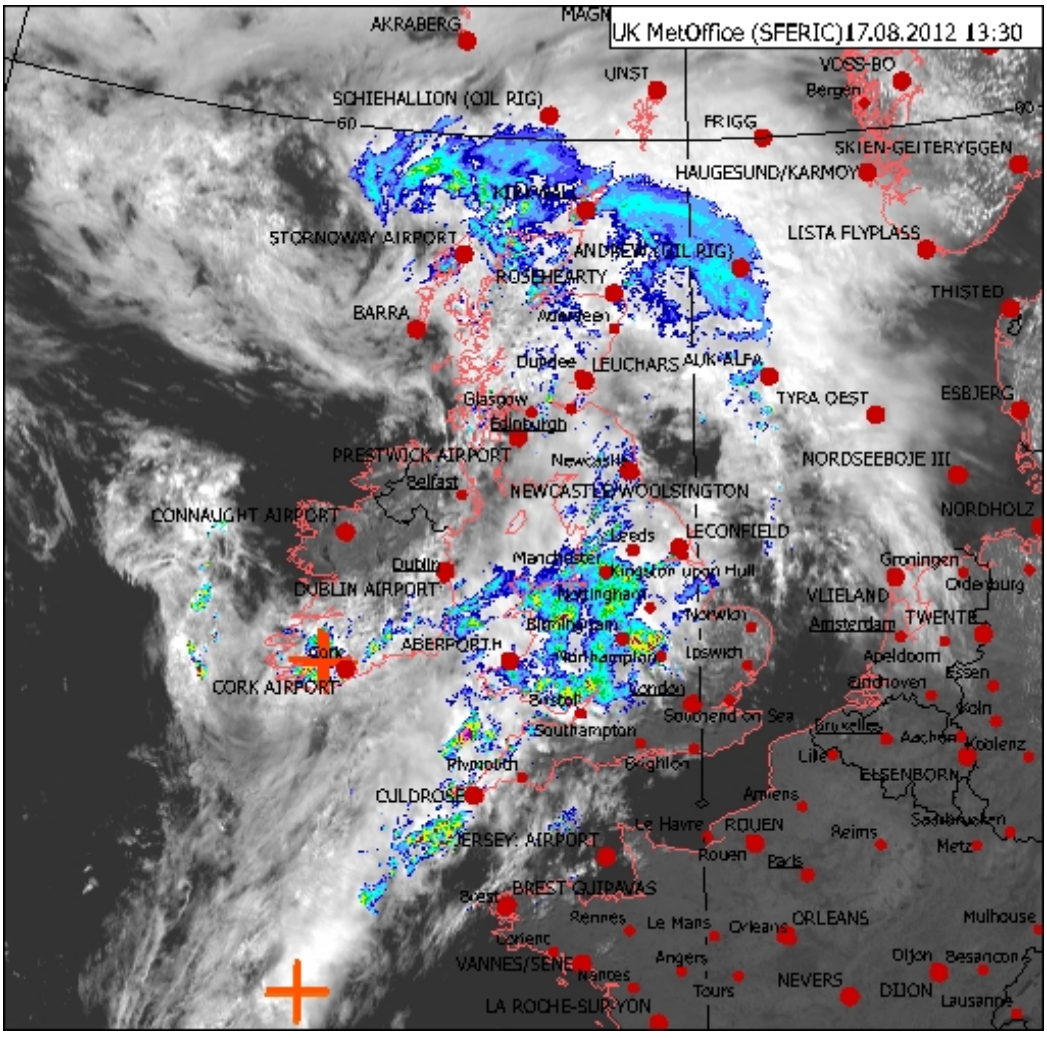
Heavy rain in the west but very warm in the south east

Description

The UK's weather will see marked contrasts over the next few days – with heavy rain in the west today and very warm weather in the south east.

Forecasters at the Met Office have issued severe weather warnings for the rain across parts of western Britain today.

Rainfall amounts could reach 60 mm or more in parts of Wales and northern England, accompanied by strong winds. This could cause some disruption in places. The rain will ease during the early hours of Saturday morning.



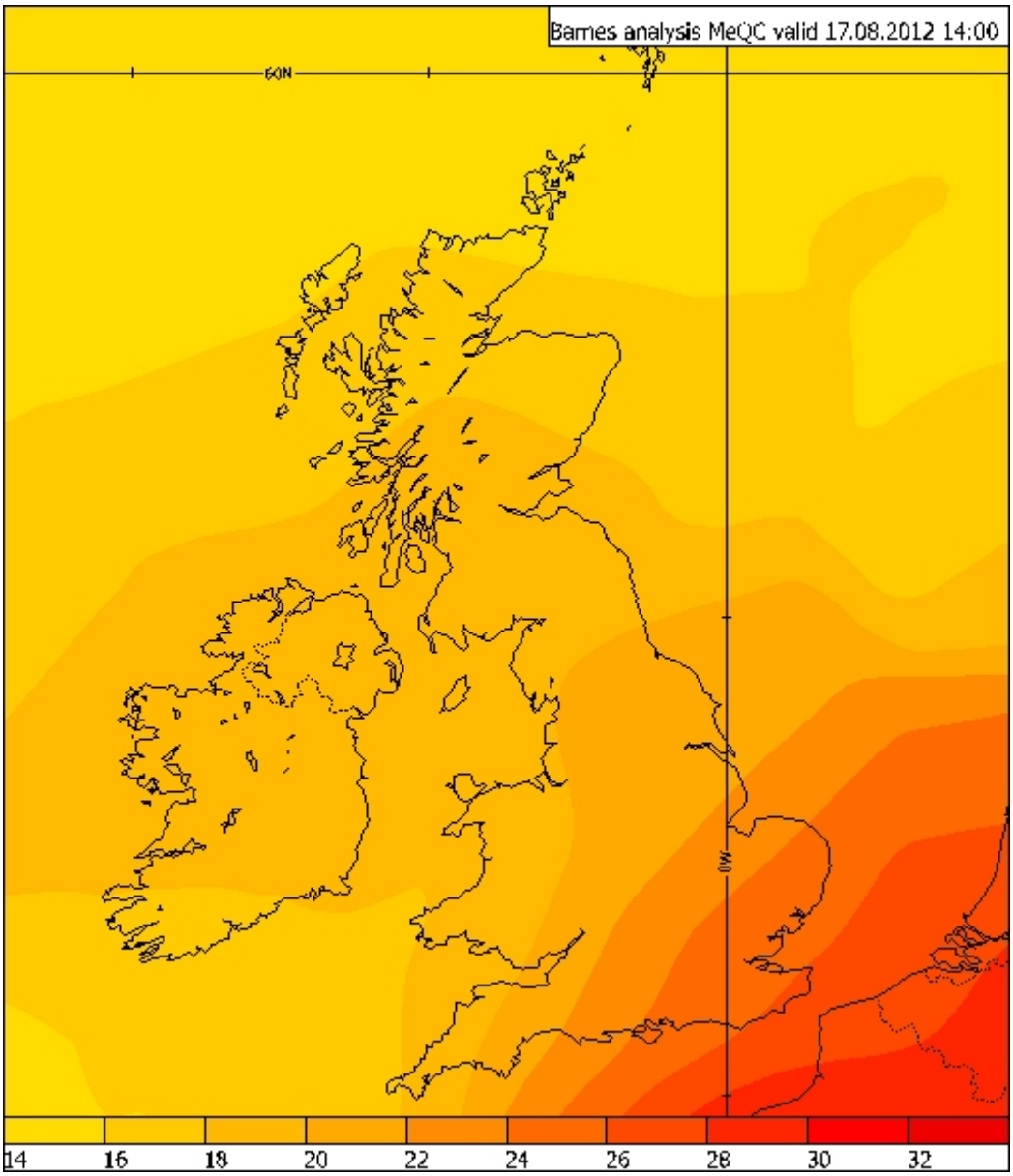
Met Office radar image from 17 August 2012

In the South East of England, it will be much drier and will become oppressively hot as warm and

humid air spreads up from continental Europe.

Temperatures are expected to rise into the high 20s Celsius today and over the weekend, and perhaps even the low 30s Celsius in parts of Kent and East Anglia on Sunday.

It remains to be seen whether the temperature will rise above the hottest seen so far this year, with 30.7 °C at St James's Park in London on 25 July.



Temperatures on 17 August 2012

While it will be mainly dry in the South East, there will be some cloud around and any sunshine will be quite hazy with fog lingering along some coasts. There may even be a few thundery showers later on Sunday.

Met Office Chief Forecaster Martin Young said: "While it will be hot in the South East, we're not expecting wall-to-wall sunshine and it will feel quite humid and oppressive over the weekend. As we

head into next week, south westerly winds will push that humid air away to bring fresher conditions, and showers to north west Britain."

For the latest information, keep up to date with our online online forecasts and warnings.

Date Created
August 2012

Hottest day of the year so far

Description

Yesterday saw the hottest day of the year so far, beating the 30.7°C recorded at St. James' Park, Greater London on 25th July.

The highest temperature yesterday was 32.4°C which was recorded at the Met Office observation site in Cavendish, Suffolk.

UK Maximum temperature 18th August 2012	Temperature
Cavendish, Suffolk	32.4°C
Cambridge, Cambridgeshire	31.7°C
Charsfield, Suffolk	31.6°C
Santon Downham, Suffolk	31.6°C
Writtle, Essex	31.5°C
Gravesend, Kent	31.3°C
Norwich Airport, Norfolk	31.0°C
Andrewsfield, Essex	30.8°C
Cromer, Norfolk	30.8°C
London St. James' Park, Greater London	30.8°C
Shoeburyness, Landwick	30.8°C

Today will see another very hot and humid day in the South East with temperatures again into the low 30°C's.

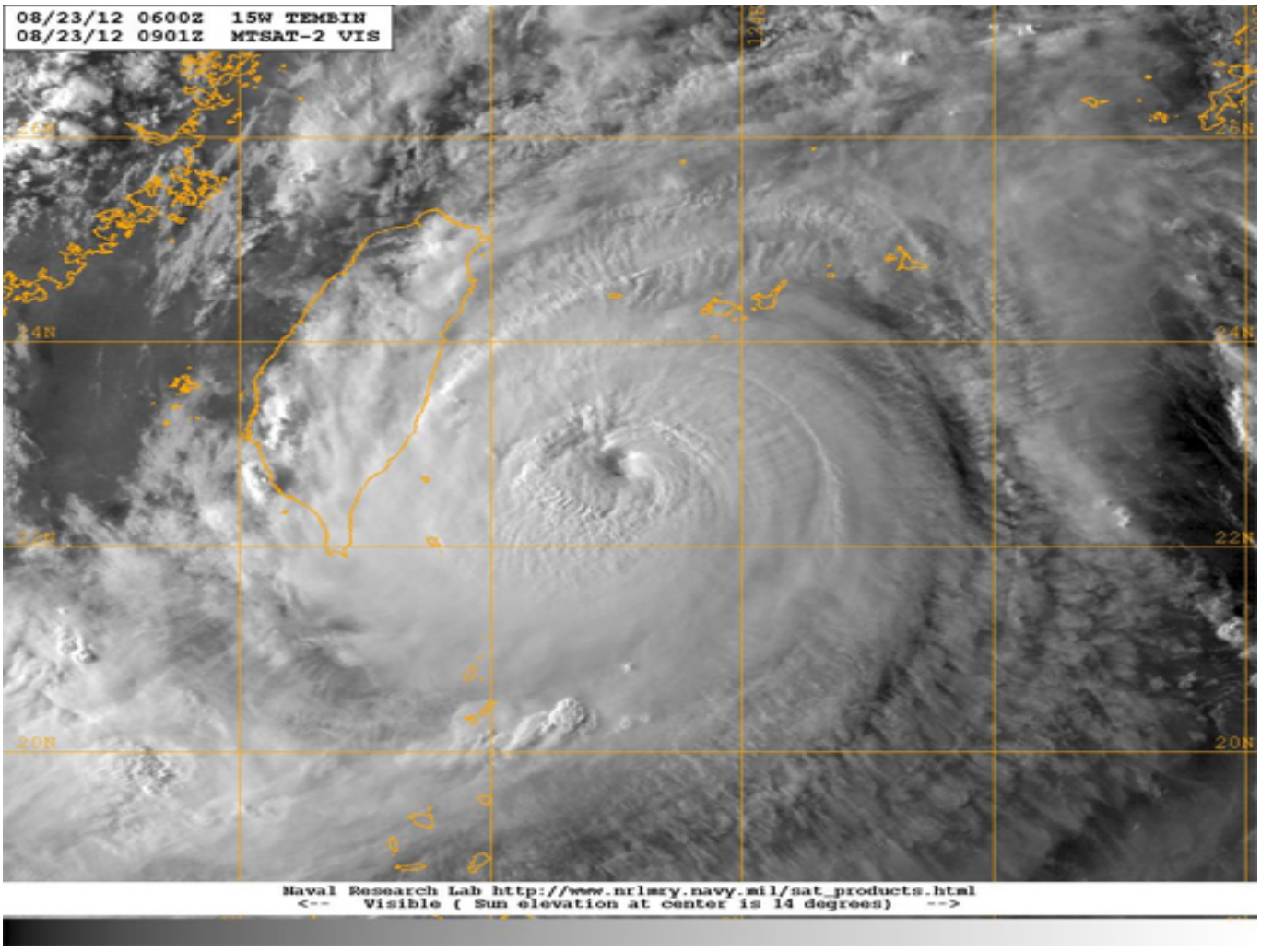
Date Created
August 2012

Stormy days ahead in the Tropics

Description

Whilst in the UK attention is focused on the weather for the coming Bank Holiday weekend, in the tropics it looks set to be a stormy few days ahead.

Typhoon Tembin has winds of over 100 mph and is set to make landfall on Taiwan on Friday. It is likely to be slow moving which could result in huge amounts of rain accompanied by flooding in parts of the island. Tembin will be the 11th tropical storm to make landfall over south-east Asia so far this season.



Meanwhile Typhoon Bolaven lies further east in the Pacific Ocean and looks set to head towards land as well. A turn to the north-west is expected, but this will still result in a likely landfall over north-eastern China in several days time.

Across in the Atlantic and Caribbean Tropical Storm Isaac is developing. It has already crossed the Leeward Islands and is set to make landfall over Hispaniola, which comprises the Dominican Republic and Haiti, on Friday. It could be a minimal hurricane by that time, but its greatest impact will again be

from heavy rain – up to 500mm is possible – accompanied by flooding and mudslides. After this time Isaac is expected to track along the length of Cuba and turn towards Florida and possibly into the eastern Gulf of Mexico over the weekend and into next week. The precise track and strength of the storm at this time is uncertain at present.

Further Atlantic tropical storms are possible in the coming week, although there is no indication yet that any of these will threaten land.

For more information on tropical cyclones worldwide visit our web pages or follow @metofficestorms on Twitter.

Date Created
August 2012

Is it the wettest UK summer on record?

Description

This summer started with the wettest June in the UK in the national records which go back to 1910 and was followed up by a wetter than average July (16th wettest), so are we set for the wettest summer on record?

Officially, in meteorological terms, summer runs from the start of June to the end of August – so there are still a few days to go for this year.

The Met Office holds many different climate datasets but uses the UK national series that goes back to 1910 when referring to records.

In this dataset, the record to beat was set in 1912, when the UK had 384.4mm of rain – although we don't have to look too far back to find a very wet summer, as 2007 is third in the rankings with 357.8mm. The 1971-2000 average for the UK in summer is 226.9mm.

Looking at this year, we have the figures for June and July, but for the UK as a whole we currently only have data up to 15 August – which show rainfall had been slightly below average to that point.

That means we can say with some certainty that we have seen 300.8mm of rain so far this summer (145.3mm in June, 115.9mm in July, and 39.6mm to 15 August), ranking 20th in the records.

There has been a fair amount of rain since then, so that ranking is sure to have climbed – but it's not possible to say until all the numbers have been crunched at the end of this month.

It's important to remember that the UK total rainfall is effectively an average of the rain that falls across the whole of England, Wales, Scotland and Northern Ireland – so looking at one station, or even one country, isn't a reliable indicator of how much rain we've seen for the UK as a whole.

We can say that this summer is likely to be one of the wettest on record – some may argue that, as it's already in the top 20% in records dating back to 1910, it already is one of the wettest on record.

We can also say that this year has continued a disappointing run of UK summers which started in 2007 – all of which have seen above average rainfall and, with the exception of 2009, below average sunshine hours.

However, we cannot say where this year will finish in the rankings or whether it will challenge the record set in 1912. For that final assessment, we'll have to wait until after the end of August.

You can see a discussion about the causes of this year's unsettled summer in an article posted earlier on our blog.

Date Created
August 2012

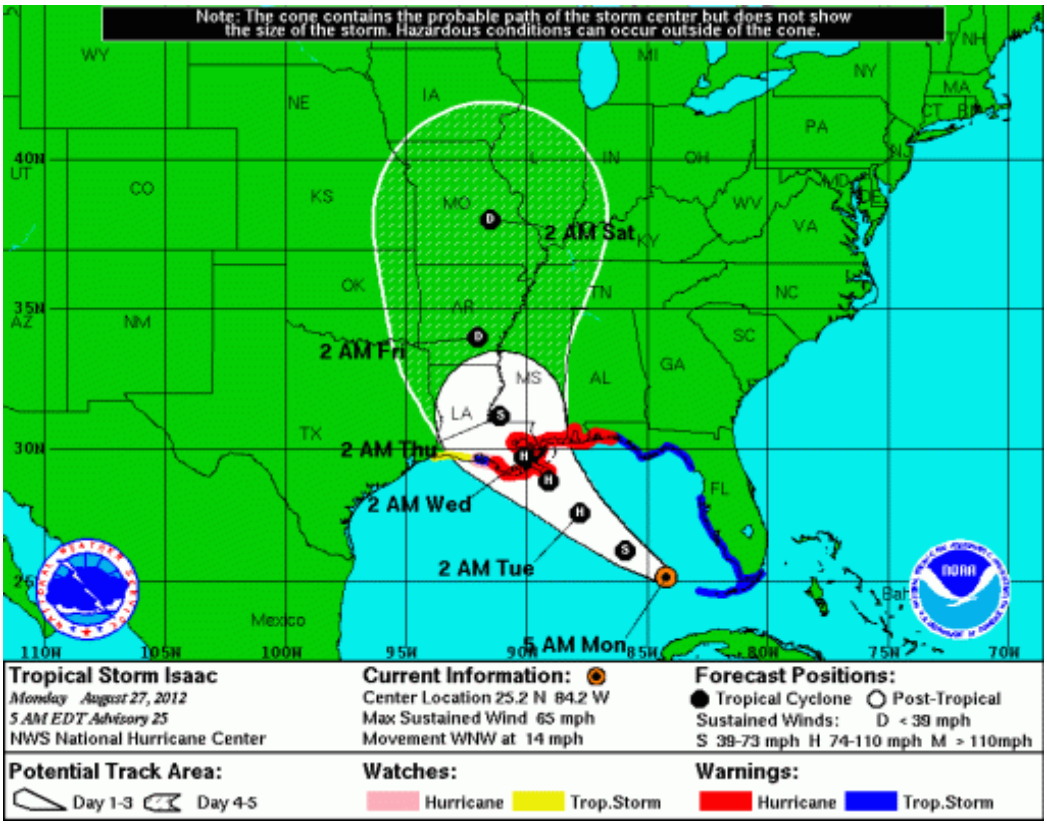
Tropical Strom Isaac likely to make landfall as Cat 2 Hurricane

Description

Tropical Strom Isaac was located about 120km WSW of Key West at 4am (UK time) on Monday 27 August, and continues to move west north west. Mean wind speeds of 65 mph have been observed by the United States National Hurricane Center aircraft. These mean wind speeds maintain Isaac as a tropical storm, just below hurricane strength which requires mean wind speeds of over 74 mph.

Satellite image and forecast track of Tropical Storm Isaac from Met Office StormTracker

The official United States National Hurricane Center (NHC) forecast track predicts an intensification of this system into a hurricane as it passes across the very warm Gulf of Mexico by midnight tonight with a high risk that the Hurricane will be a Category 2 storm, with winds of around 100 mph when it makes landfall along the US Gulf coastline during the early hours on Wednesday morning.



Official National Hurricane Center forecast for Tropical Storm Isaac

The NHC notes that there is still a great deal of forecast uncertainty in exactly where Isaac will make landfall, with locations ranging from the Texas/Louisiana border eastward to the Alabama/Florida border. The most likely forecast track has the eye of the storm making landfall close to New Orleans, but the NHC state that it is important not to focus on the exact forecast track due to forecast uncertainties and the fact that significant hazards extend well away from the centre.

Therefore, there is a high risk of very rough, chaotic seas and hurricane force winds across the Gulf of Mexico impacting marine traffic and oil and gas production during the next few days. This will be followed by torrential rain, potentially as much as 500mm in 48 hours, causing flash flooding. There is also the risk of embedded tornados and more general hurricane force winds, with a storm surge and over topping waves along the Gulf coast from Alabama to central Louisiana, with New Orleans at an increased risk of being impacted than previously expected.

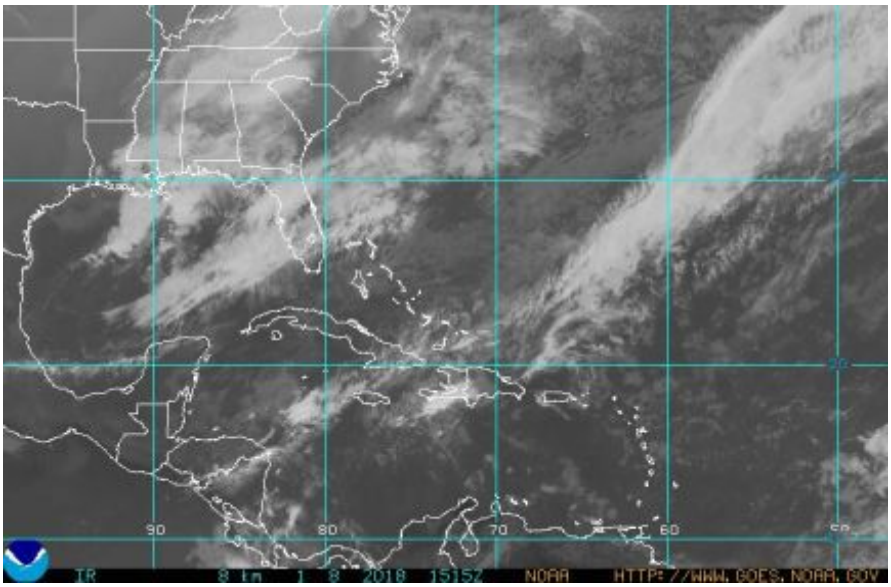
The Met Office's StormTracker allows you to monitor all named storms around the globe to evaluate risk and enables the comparison of past and present storms. It can be used with the official warnings and guidance from the National Hurricane Center and other Regional Specialised Meteorological Centres (RSMCs) who have responsibility for the issue of tropical cyclone warnings.

Date Created
August 2012

Tropical Storm Isaac heads toward New Orleans

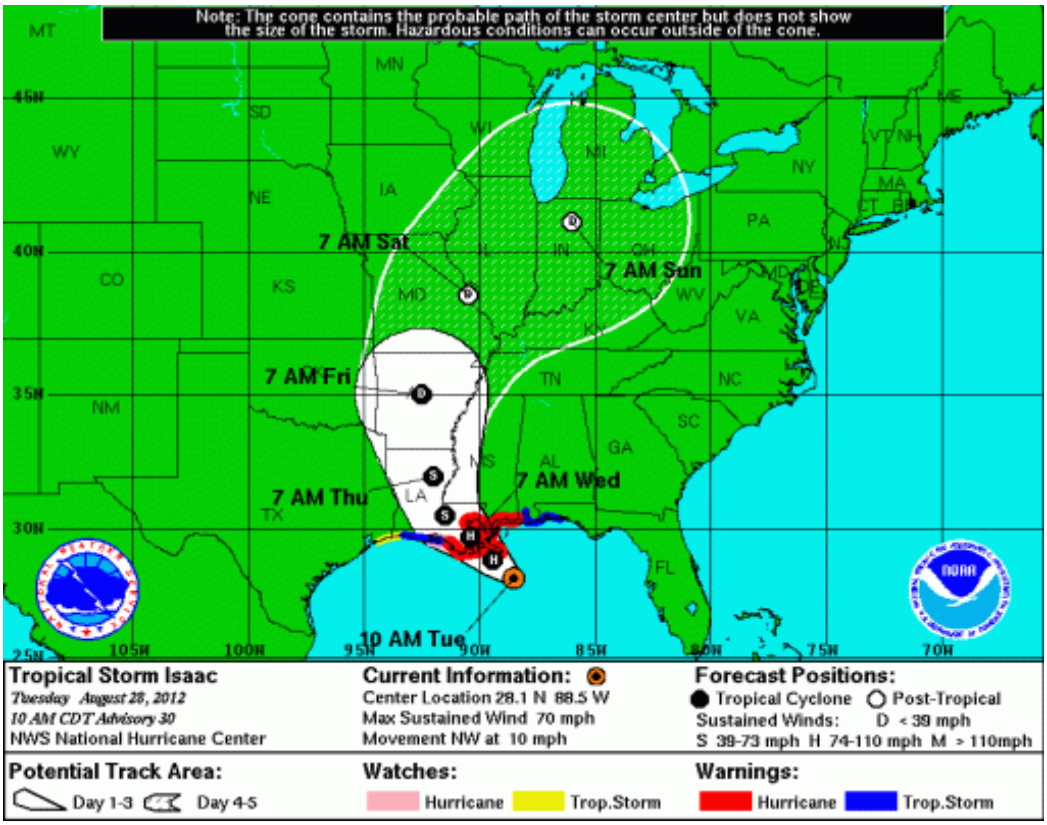
Description

At 1500 UK time on Tuesday 28 August, Tropical Storm Isaac was located about 150 km southeast of the Louisiana coast and heading northwest at about 15 km per hour. Mean wind speeds of 70 mph at the surface have been observed by the United States National Hurricane Center aircraft. These mean wind speeds maintain Isaac as a tropical storm, just below hurricane strength which requires mean wind speeds of over 74 mph.



Satellite image showing Tropical Storm Isaac (Source: NOAA)

Although Isaac is expected to make landfall within the next 12 to 18 hours, there is still time for Isaac to intensify and become a hurricane. The official United States National Hurricane Center (NHC) forecast track predicts an intensification of this system into a category 1 hurricane as it continues its track northwestwards over the very warm Gulf of Mexico with winds increasing to around 80 mph when Isaac makes landfall at around 0600 UK time on Wednesday morning.



Official National Hurricane Centre Forecast for Isaac on Tuesday 28th August

The latest forecast from the NHC suggests that Isaac will pass just to the west of New Orleans, though there is still some uncertainty over the exact track and intensity of the storm and the impact of Isaac will be felt quite widely along the Gulf coast region.

Although hurricane Isaac is not expected to be as intense as hurricane Katrina which caused massive damage to New Orleans 7 years ago, there is still a risk of extreme rainfall with up to 500 mm in 48 hours resulting in flash flooding and storm surge along the coast, in addition to the damaging winds. As Isaac moves inland it will weaken, but is still likely to result in torrential rain, perhaps with tornados or very squally winds. There is a risk of flooding over the lower Mississippi valley region for the next few days.

You can find out more about Tropical Cyclones on our website or read our case study on Hurricane Katrina on the Met Office Education website.

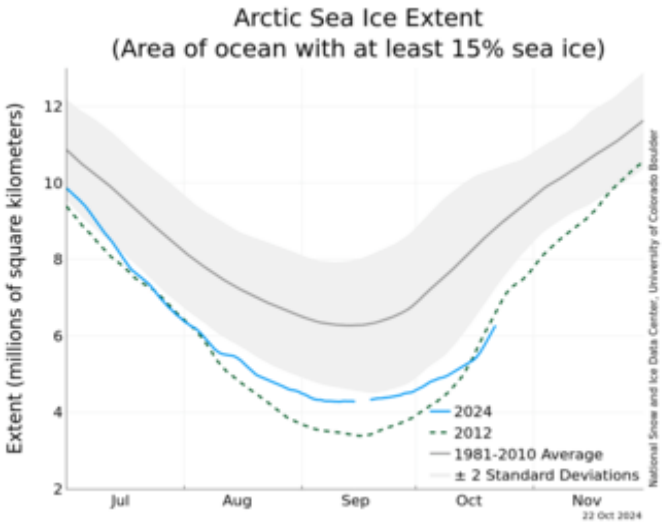
Date Created
August 2012

Record low for Arctic sea ice extent

Description

This week the National Snow and Ice Data Centre (NSIDC) announced that Arctic sea ice extent has reached a new record low since satellite data records began in 1979.

According to the NSIDC, observations show there were 4.1 million square kilometres (1.58 million square miles) of sea ice on 26 August.



Arctic sea ice extent The black line shows the 1979 to 2000 median extent. Credit: National Snow and Ice Data Center

This is 70,000 square kilometres (27,000 square miles) less than the previous record low set on 18 September 2007.

The previous record was the sea ice minimum for the year – which normally occurs at the end of summer before cooler temperatures sea ice start to form.

The July 2012 ice extent was the second lowest observed during the satellite era, following the record low observed in 2011. The synoptic conditions during the month were variable, and much of the Arctic was relatively warm with temperatures 1-3 degrees Celsius above the 1981 to 2010 average over the Beaufort Sea and regions to the north.

By 1st August the daily extent was lower than the previous record low for the time of year recorded in 2007, and has since remained at a record low value. Between 4th and 9th August there was an extremely rapid loss of ice cover in the East Siberian Sea, coinciding with a severe storm over the Central Arctic. This rapid loss of ice cover may have been caused by ice breaking up and melting due to the strong winds generated by the storm, although it is also possible that the melt would have occurred anyway at this time as the ice concentration in this region was already low.

With this previous record already broken in August, it's likely this year's sea ice extent will continue to decline into September. The NSIDC will announce when the Arctic sea ice extent has hit a minimum for this year when this occurs, most likely toward the middle of next month.

Declining trend in sea-ice

Satellite records began in 1979 and have shown a long-term decline in sea ice extent. However, the rate of decline has accelerated in the past 15 years and the last five years make up the lowest five extents in the 32-year record.

Climate models which simulate future Arctic sea ice extent show wide variations, but Met Office results suggest the area could be nearly ice-free in summer as early as 2030.

However, models do not suggest the current accelerated rate of decline would continue or that there was any 'tipping point' from which ice extent could not recover.

What are the impacts for the UK?

Long-term changes in Arctic sea ice are likely to have impacts locally in the Arctic as well as driving changes in European and global climate.

As the sea ice decreases, the immediate impact is for a the lower atmosphere in the Arctic to be warmed by the Arctic Ocean – which is relatively warm compared to the ice cover.

However, there is also evidence that depleted sea ice alters atmospheric circulation patterns outside the Arctic throughout the following months and into winter.

This appears to result in high pressure over the Arctic and low pressure further to the south over the mid-latitudes – which in turn tends to drive more easterly winds across Europe, particularly in winter.

While other factors are also involved in determining winter climate, this raises the risk of cold winter conditions over northern Europe.

However, the relative importance of sea ice conditions and other factors in producing cold winters is being investigated by Met Office scientists and others.

You can read more about Arctic sea ice in our research news pages.

Date Created
August 2012

Cold night breaks August records in places

Description

Last night saw some unusually cold August night-time temperatures across parts of the UK, with some observation sites hitting record lows.

Among those stations seeing their coldest recorded August temperature were:

Braemar No 2, Aberdeenshire: -2.4 °C

Aviemore, Highlands: -1.8 °C

Redesdale Camp, Northumberland: -0.7 °C

Bainbridge, North Yorkshire: 0.5 °C

Benson, Oxfordshire: 2.1 °C

Bradford, West Yorkshire: 2.8 °C

Observation sites have operated for differing amounts of time, so some records are more significant than others. Out of the new records, Bradford has the longest historical dataset – going back to 1908.

It's worth noting that none of these break the all-time record low UK temperature for August, which is -4.5 °C recorded at Lagganlia, in Inverness-shire on 21 August 1973.

Why was it so cold in places?

Last night saw northerly winds drag cold air from quite a long way north over the UK. This air was also dry, which meant there was very little moisture to help retain heat from the day.

This, combined with clear skies caused by the high pressure sitting over the country, meant all the heat radiated into the sky – leaving very cold temperatures for the time of year.

Once in a blue moon?

While UK weather records such as this aren't broken once in a blue moon (we've had many broken already this year), this set does more or less coincide with the astronomical phenomenon.

A blue moon occurs when there are two full moons in one month – which is perhaps not as rare as the saying may have us believe. There was a full moon at the start of August and now a full moon is due tonight.

You can read more about this in articles online, such as this one at earthsky.org

Date Created
August 2012